

CLAIMS

1. A film-forming binder polymer for a coating composition wherein the polymer is modified by the presence of bonded moieties obtainable
5 from plant gum.
2. A binder polymer according to Claim 1 wherein the plant gum is obtainable from plant fibre.
3. A binder polymer according to Claim 1 or Claim 2 wherein the plant gum is obtainable from corn fibre.
- 10 4. A binder polymer according to any one of the preceding Claims wherein the bonded moieties comprise proteo-xylans.
5. A binder polymer according to any one of the preceding Claims wherein the bonded moieties comprise furanose.
6. A binder polymer according to any one of the preceding Claims
15 wherein the bonded moieties are chemically attached to the binder polymer.
7. A binder polymer according to any one of the preceding Claims wherein the plant gum comprises a mixture of polysaccharide and protein.

8. A binder polymer as claimed in Claim 1 wherein the bonded moieties are derived by adding plant gum to the polymerisation reaction mixture from which the binder polymer is formed.
9. A binder polymer as claimed in Claim 8 wherein the plant gum is
5 corn fibre gum.
10. A binder polymer according to any one of the preceding claims wherein the polymer is an aqueous dispersion of particles.
11. A process for modifying film-forming binder polymers which are binder polymers for coating compositions wherein plant gum is added
10 to the polymerisation reaction which produces the binder polymer.
12. A process as claimed in Claim 11 wherein the plant gum is corn fibre gum.
13. A coating composition wherein the composition contains a modified binder polymer as claimed in any one of the preceding claims.
- 15 14. A coating composition according to Claim 13 wherein the composition further contains at least one component selected from the group consisting of pigments, fillers, extenders, rheological modifiers, dispersants, antifoams, flow aids, crosslinkers and biocides.
- 20 15. A coating composition according to claim 14 wherein the selected component is pigment.

16. A coating composition according to Claim 15 wherein the pigment is titanium dioxide.
17. A coating composition according to Claim 16 wherein the pigment is rutile.
- 5 18. A coating composition according to any one of Claims 1 to 17 having a $\text{PVC}(\text{TiO}_2)$ of from 5 to 35%.
19. A method for improving the opacity of coating compositions wherein the method comprises employing a modified binder polymer according to any one of Claims 1 to 10 as a binder in a coating
10 composition.
20. A method for improving the opacity of coating compositions comprising particulate non-film forming materials wherein the method comprises employing a modified binder polymer according to any one of Claims 1 to 10 as a binder.
- 15 21. A method for improving the opacity of coating compositions according to Claim 20 wherein the particulate non-film forming material is titanium dioxide.
22. A method for improving the opacity of coating compositions according to Claim 20 wherein the particulate non-film forming
20 material is rutile.